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## ORIGINAL DEPARTMENT.

### LECTURE.

#### THE PRINCIPLES OF ANTISEPTIC SURGERY.

BY JARVIS S. WIGHT, M. D.,

Professor of Surgery and Clinical Surgery at the  
Long Island College Hospital.

[The speaker, after having explained the most recent views on the nature of the processes of fermentation and putrefaction, proceeded :—]

It appears, therefore, that the cells of nutrition absorb, decompose and eject some forms of matter, in a manner similar to torulæ, bacteria and septic germs. And this similarity elucidates the subject of antiseptics and disinfectants. But antiseptic surgery depends on infection and sepsis; for without infection there would be no antiseptic surgery; and to understand antiseptic surgery implies a knowledge of antiseptics and disinfectants.

Let us at once define the terms antiseptic and disinfectant:—1. *An antiseptic is a preventer of sepsis.* For example, when carbolic acid preserves septic germs, so that they cannot infect, it acts as an antiseptic. And, 2. *A disinfectant is an arrester of sepsis.* For example, when chlorine decomposes septic products and septic germs, it acts as a disinfectant. In a general way, fermentation and putrefaction may be included in these definitions. So that a preventer of fermentation and putrefaction may be called an antiseptic; and an arrester of fermentation and putrefaction may be called a disinfectant. Hence any place containing fermentable or putrescible matter may be anti-

septic; and any place containing fermenting or putrefying matter may be disinfected. Notably, however, antiseptics prevent septic changes taking place in the body, that is, they prevent infection; and disinfectants arrest septic changes going on in the body, that is, they arrest the changes caused by infection.

On the one hand there is a nutrition cell; on the other hand there is a septic germ; and the septic germ is ready to infect the nutrition cell. In one case it is possible to antisept, preserve, or disable the septic germ, so that it cannot infect the nutrition cell; in another case the nutrition cell may be so changed by an antiseptic that it cannot be infected by the septic germ; and in still another case it is competent to affect by an antiseptic both the septic germ and the nutrition cell, so that they cannot act upon each other.

Now suppose that the nutrition cell is infected by the septic germ, that the bacterium is using up the oxygen of the cells, that sepsis is going on. Again, in one case the septic germ may be destroyed, so that infection ceases, that is, the nutrition cell is disinfected; in another case the nutrition cell may be destroyed, and then infection is arrested; and in still another case both the septic germ and the nutrition cell may be destroyed, and then sepsis can no longer go on.

In this connection two important observations may be made:—1. Locally, the infected nutrition cells may be destroyed either by an antiseptic or a disinfectant, so as to limit the sepsis, without harm to the general system. 2. If the sepsis is general, it must be arrested by the use of some agent that will not injure

the nutrition cells, but will destroy the life of the septic germs.

Here, while admitting the importance of the germ theory, and the force of septic germs, I wish to state that there are many other forces surrounding and involving the living cells, which may, from time to time, become morbid in their tendency. These forces, such as gravity, heat and light, may, under favorable conditions, so far affect the cells of nutrition, that they, for a longer or shorter time, may live a morbid life. And these cells, during this morbid life, may make waste products that are extremely offensive, and readily infected by septic germs; and then the morbid cells themselves will become infected, and finally the sepsis will invade the healthy neighboring cells. For instance, let me direct attention to the well-nourished body; it develops, grows, moves, and works in the midst of forces, such as gravity, cohesion, affinity, heat and light, that is, its existence is intimately related to these forces. In fact, the harmonious coöperation of these forces makes organization possible; and if this harmony be broken, disorganization supervenes. Precipitate the body from a sufficient height, and it is dashed in pieces; wrap it in the flames, and it melts into ashes and dust; pour the sunbeams of summer on it, and it may perish; let the lightning strike it, and the poles of its organic affinity are torn asunder; and overdose it with potential drugs, and its vital motions cease.

Under the abnormal action of physical forces nutrition is impaired. The cells are injured by a fall, a blow, or a burn; they are not killed outright; they do not die at once; they try to live; they struggle on for a while; it is a morbid life; in fact, they are sick, some unto death, and some unto life; it is slow work, but they at last recover; and while they are sick, they behave like ferments, putrefaciants, septic and nutriti-faciants; they die perhaps, and enter the blood and lymph, which they contaminate and poison, and then poison the general nutrition; and the sick cells may go into the general circulation, and infect the healthy cells; and what is more, the waste products of this impaired nutrition may permeate the lymph spaces, the lymphatics, and the blood vessels, and disturb more or less seriously the nutrition; and then there supervenes a condition like sepsis, a *sepsis without the septic*; there is an infection without the bacteria, a contamination by sick cells and their waste products; but one says, there

is surgical fever; and another says, there is inflammatory fever; there is a something which gets into the streams of the circulation, and affects the blood cells; this something and the contaminated blood cells go out into the tissues; there are wandering cells, repair cells, and pus cells; and these cells, in their diapedesis, are below par; they affect, if they do not infect, the cells of the tissues, and impair their nutrition. Yes, perhaps the fluids of the blood, the lymph, the tissues, the granulations, and the pus contain, during surgical fever, and inflammatory fever, the infection; and perhaps the corpuscular elements have no harm and no blame; and it may be that the infection is a chemical poison generated for a time, or it may be that these fluids are infested with bacteria.

Give the bacterium his due, for he is a scavenger, and may begin his work too soon, but that is not his fault, since he may mistake a dying cell for a dead one. But there are other factors besides bacteria that claim the attention of the antiseptic surgeon. The baneful effects of the products of gangrene and ulceration, and of the waste products of repair, have been too little considered. How careful we are to remove the waste products of nutrition: carbonic oxide, urea, excrement, and animal matters are borne away by the air or covered by the soil. Shall, then, granulations consume their own waste products? Shall the material used and ejected be used over again, as if it were fresh and pure? *Ventilate wounds, amputations and ulcers, and wash away the waste products.* But the objector says, you admit the mote-laden air; and this air is full of germs, disease germs, septic, and you must keep away the air to exclude the germs. But, in reply, there are germs that live without oxygen; and the more the air is excluded, the more these germs can flourish. Besides, the granulations must have oxygen, or they sicken, and then the anaerobic germs can attack and feed on them. In the absence of complete proof, it is easy to assume the universality of air germs. Germs are, perhaps, well-nigh universal; but only some of them are disease germs. It is at least admitted that the bacteria are concomitants of disease, while the infusoria are generally quite harmless. If every germ of the air were a disease germ, surely it would be a wonder if the germs were not the survivors of the nutrition cells, and thus the "fittest," and then the race would come to an end.

It appears, therefore, that antiseptic surgery is obliged to deal with the antagonism between different kinds of living matter. It seeks the best means of preventing and arresting the invasion of the tissue cells by septic germs; for the prevention of infection suggests the subject of disinfection. And a substance in one relation may be an antiseptic, and in another relation may be a disinfectant. For instance, carbolic acid, when applied to an infected wound, may antiseptise the infecting virus, and disinfect the wound; but if chlorine be diffused through an infected hospital ward, it will destroy the infecting virus, disinfecting the ward and the various objects that it contains.

Antiseptic surgery has become famous, so has carbolic acid; and the fame of carbolic acid comes from its antiseptic power. But carbolic acid has other properties: carbolic acid is an astringent, arresting bleeding from small vessels, and preventing the entrance of septic germs into the lymph spaces, lymphatics, and blood capillaries; it is a local anodyne, alleviating the pain and the shock of injury; it is a local anæsthetic, mitigating and preventing the pain and shock of operations; it slows, or inhibits the amœboid motion of the white cells, often modifying in a favorable manner the process of plastic infiltration; it diminishes reflex irritation, controlling the action of the vaso-motor nerves, limiting congestion and exudation, and tending to subdue inflammation. See how many substantial reasons why carbolic acid may be used in surgery; and these reasons are not because carbolic acid is antiseptic. Please to remember that I do not ignore the antiseptic property of carbolic acid. I simply object to the apotheosis of its antiseptism. That it can, from time to time, prevent and modify infection and sepsis is a great gain to surgical therapeutics; but it can also kill and mummify tissue cells, white cells, repair cells, granulation cells, and pus cells. I am unable to say whether it will kill the septic germs or the cells of nutrition first. I do not know what form of living matter can longest resist the antiseptic action of carbolic acid. One thing is pretty evident, the internal use of carbolic acid can do but little good in general infection and sepsis, for, if it destroys the so-called septic germs, it may also destroy the cells of nutrition. And should there be a sepsis, or a fermentation, or a zymosis, by the living cells of the blood and tissues, carbolic acid as an antiseptic would certainly

not be indicated, especially when we possess such a remedy as quinia. The theory and the practice of some of the advocates of antiseptic surgery may be put into the form of a syllogism. The mote-laden air is full of germs; germs are the cause of septicæmia: carbolic acid will destroy septic germs; therefore, carbolic acid will prevent septicæmia. The air is full of germs, we admit, and the air germs may be the cause of sepsis, we also admit; but septic conditions arise when there are no germs except the sick cells; while many of the air germs are innocuous; and even if carbolic acid, most vigorously applied, will prevent septicæmia, it cannot prevent the "septicoid" work of injured and sick nutrition cells. So the syllogism does not contain all the facts of the problem; and if it did, the completeness of the practical work that it proposes would be simply impossible.

To turn from this picture of putting carbolic acid on the septic germ, I have said that there are *anaerobic* germs; they are, perhaps, the *vibrios*, so-called; they live in the depths of some fluid containing putrescible matter; they, like fish, cannot live in the air; they go into the circulation and penetrate the tissues; they liberate the sulphur, phosphorus and nitrogen, which combine with hydrogen and go into the air in the form of offensive gases that are slowly oxidized. This disastrous work of the *vibrios*, going on after death, may begin during life, may originate in the waste products of nutrition or repair, and eventuate in the decomposition of the living cells. But a beautiful provision of nature comes in here to our aid. A disinfectant, of undoubted power, too little understood, too little appreciated, and not used as much as it ought to be, can do two important things. I mean chlorine, which has a strong affinity for hydrogen. Chlorine will abstract hydrogen from its compounds with sulphur, phosphorus and nitrogen, and this abstraction of hydrogen destroys septic and putrid products, which, as every one knows, act as powerful chemical poisons. Chlorine will take hydrogen from water, and leave nascent oxygen, which is like ozone, and will oxidize the bacteria and kill the *vibrios*. Chlorine decomposes septic products and destroys septic germs.

The vast practical importance of this subject cannot better be illustrated than by going over the main points in the history of an outbreak of septicæmia in the Long Island College Hospital, during the spring and summer of 1873.

The medical officers of the Executive Committee requested me to submit a plan for purifying the infected wards. The following plan, approved by my colleagues, was carried out, under my personal supervision. The patients and everything movable, except the bedsteads, were removed from the infected wards. The straw, some of the bedding, and some of the clothing were burned; the rest of the bedding and the clothing were put into a strong solution of carbolic acid for two days and then taken out, when they were washed and dried; the wards containing the bedsteads were fumigated, for three days, with the hot vapor of carbolic acid, when the walls, floors and bedsteads were scrubbed with a strong solution of carbolic acid; everything was then thoroughly ventilated, and the patients were put into the purified wards; and the septic demon went on with the same pace as before the lavish expenditure of carbolic acid. So much that time for the use and fame of the great antiseptic. We were powerless, or in error; we shall see.

Later on in the season I came on duty in the surgical wards, our fruitless work of purification still fresh in memory. The results had been bad, and the prospects were discouraging. Could anything be done to arrest and avert this sepsis, this infection, and banish the septic germs? It then occurred to me that I had used an antiseptic which might preserve the septic germs for a time, and afterward evaporate, leaving the germs alive and ready to continue their work. Surely I had overlooked the surgeon, the interne, and the nurse, whose hands might be the nursery for all kinds of septic germs, ready for transplantation into the first congenial soil, and the waste products of nutrition and repair would constitute such soil, and are abundant in the wards of a hospital. Remembering the disinfecting power of chlorine, I determined to use it, which I did in the following manner:—*The hands of the surgeon, the interne, and the nurse, and all instruments and appliances, were disinfected by a solution of chlorinated soda, before each operation and each dressing of a wound, and in about two weeks sepsis had ceased its ravages.* During this time, and subsequently, some wounds were dressed with carbolized oil, some with sweet oil, some with castor oil, some with a solution of chlorinated soda, some with zinc ointment, some with red wash, some with fresh water, and some with dry oakum, and there was

no return of the sepsis, nor has there been to this day; but a bottle of liquor sodæ chlorinatæ has been standing on the table in each of the wards for constant use ever since.

Suppose the germ theory to be true—for it is good enough to be true—it is not universal; all diseases are not due to septic germs, though some are, and the destruction of septic germs before they infect prevents sepsis and disease. Admit that antiseptics is good practice, it must be further admitted that disinfection of infecting material is better practice, for it decomposes, where antiseptics might preserve. And this better practice may be illustrated and proved by experience. At any rate, the most rigid antiseptic surgery, so-called, may be equaled by careful disinfection and ventilation. Clean hands, clean air, clean water, clean sponges, clean instruments, clean bedding, clean wards, clean patients, and clean wounds, by whatever means obtained, are the groundwork for the best results. And it is true, that, in Scotland, Germany, England and America, *cleanliness* has done as much, if not more, than the great antiseptic, for the safety and recovery of surgical patients. Cleanliness has been overlooked, and the pleasing results of a beautiful theory and a magnificent practice, which are the *post hoc*, have been looked upon as the *propter hoc* of carbolic acid. I do not condemn carbolic acid, but use it constantly, for it is a priceless remedy, having wonderful powers, such as were unknown when it was first employed in the healing art.

I have spoken of the waste products of repair; I mean the repair of injury. It is true that nature is prodigal of material; this is especially so of repair; much more than is needed is furnished, and the surplus is or ought to be removed. Can the ferments live on alcohol? Can the bacteria live on sulphuretted hydrogen? Can the liver cells live on bile? Can the blood cells live on carbonic acid? Can the vibrios live on air? And can the granulation cells live on pus? Surely it would not be good practice to compel the cells of repair to consume their own waste products, or to turn these products back into the general system to poison it.

It is not my purpose here to go into a lengthy consideration of the various antiseptics and disinfectants. I simply note some of them. Pulverized charcoal, whose carbon atoms attract and condense the oxygen atoms of the air into an active agent like ozone; permanganate of



potassa, whose abundant oxygen is liberated, and becomes nascent and active; and sulphurous acid, which also parts with oxygen, rendering it like ozone, may, on account of this condensed and active oxygen, superoxidize the bacteria, and oxidize the vibrios, and put an end to sepsis, as well as putrefaction and fermentation. I might dwell on the use of quinia, which has the extraordinary power of destroying some kinds of septic germs as they are at work amid the living cells, and inhibiting the activity of some others, when the nutrition cells cannot alone withstand them; and I might rehearse the good qualities of alcohol as an incompatible to septic germs, and a sustainer of nutrition cells, but I forbear, as my object was to make some remarks on *sepsis* and *antiseptic surgery*.

And, in conclusion, in doing this, I have traced the thread that runs through living matter in its various forms. I have compared, in a certain way, sepsis with fermentation, putrefaction and nutrition, and have also compared impaired nutrition, caused by the abnormal action of physical forces, to sepsis, showing the limited application of the germ theory to the practice of antiseptic surgery; and I have intimated that after all sepsis may be a kind of putrefaction, modified and changed by the resisting and yet impaired action of living cells; a putrefaction beginning, under certain conditions and relations, in the waste products of nutrition and repair, before these products are removed from the vicinity of the living cells that formed them; in fine, that there is a contest betwixt nutrition and putrefaction, a battle of the pigmies; a mistake, perhaps, of the putrefaci-ents in the matter that they are called upon providentially to decompose for vegetation; flesh that cannot or ought not to live; and so the scavengers come early, bent on destroying the putrescible individual, but, in the main, wholesome to the many who live; and I have not denied the value of preserving the scavenger until other natural causes may have done his work; but I have said that the destruction of the initial soil of infection, and the consequent destruction of the septic germ, is the best method of antiseptic surgery. The principle involved here seems to be sound. In essentials there should be agreement; while in particulars, leading to the essentials, there may be a difference of opinion and a variety of practice.

## COMMUNICATIONS.

### CASES OF FRACTURE OF THE ELBOW-JOINT, WITH RETURN TO USEFULNESS, AFTER YEARS OF DISUSE.

BY O. H. ALLIS, M. D.,

Surgeon to the Presbyterian Hospital.

These cases, collected from different sources, illustrate an important principle in surgery. They were all unpromising and of a very aggravated character; they all, at a remote period, became sound and useful.

CASE 1.—A woman, aged forty-four, fell upon the sidewalk, in January, 1850, striking her right elbow. I\* saw her a few minutes after the accident, but the parts about the joint were already considerably swollen, and it was not without difficulty that the diagnosis was made out. The forearm was slightly flexed upon the arm, and pronated. On seizing the elbow firmly, a distinct motion was perceived about the condyles and a crepitus. While moderate extension was made upon the arm, the condyles were pressed together, when it was apparent that they had been separated. On removing the extension they again separated and the olecranon drew up. She was in a condition of extreme exhaustion, and the bones were easily placed in position. An angular splint was secured to the limb, and every care used to support the fragments completely, but gently.

From this date until the conclusion of the treatment, the dressings were removed often, and the elbow moved as much as it was possible to move it.

Seven months after the accident the elbow was almost completely ankylosed at a right angle. The fingers and wrist were also quite rigid. Six years later the ankylosis had nearly disappeared. She could now flex and extend the arm almost as much as the other. The wrist-joint was free, and the fingers could be flexed, but not sufficiently to touch the palm of the hand.

CASE 2.—A gentleman was struck with the tongue of a carriage with which a couple of horses were running. The blow was received directly upon the back of the elbow. Dr. Sprague and myself† removed some small fragments of bone, and while opening the wound

\* Hamilton, on Fractures, p. 254.

† Hamilton, on Fractures, 254.

for this purpose we could see distinctly the line of fracture, extending into the joint as well as across the bone. The condyles were not separated. The subsequent treatment consisted only in the use of such means as would best support the limb and most successfully combat inflammation. The arm and forearm were laid upon a board and well-cushioned angular splint, covered with oilcloth, to which they were fastened by a few light turns of a roller. *During the first year* there was no motion in the elbow-joint, but he can now flex and extend the forearm through about 45°.

CASE 3.—Q. R., aged twenty-eight, was thrown, in a scuffle, violently upon his elbow on a bar-room floor. Arm instantly rendered helpless, olecranon split off, and withdrawn about two inches, and head of the radius displaced laterally. The resulting inflammation was great, and it was a fortnight before the olecranon could be brought down to its proper place. The arm was not moved during the repair. Six months from the inception of the injury his arm was stiff, painful and unserviceable. At this time he was advised to rub it well with liniments, and begin to carry such weights as he could. At the expiration of a year he could extend his arm almost to a straight line. At this time he began flexing it, and it was two years before the motion was as fully restored as it is at present. Had the head of the radius been replaced, he would have now complete pronation and supination, which are really the only privations he suffers.

CASE 4.—P. Roberts, aged 37, a rigger by occupation. He was engaged in raising a flag-pole, and when he had it about half way up he found it necessary to ascend it to make some alteration in his hoisting apparatus. He had ascended to the crostrees, a distance of forty-five feet from the ground, when the pole broke from its fastenings and all came to the ground. His injuries were aggravated by the rebound from the crostrees, which hurled him back into the air about ten feet. He was taken up unconscious, and remained so for forty-eight hours. There was fracture of the bones of the nose, dislocation of the acromial end of the clavicle, fracture of the ulna about three inches below the joint, and a complete anterior displacement of the head of the radius. The arm was dressed with an anterior angular splint, and the dressing changed twice, at intervals of two weeks, and entirely removed

at the end of six weeks. During the repair there was no effort to reclaim the joint. At the end of three months he applied to two hospitals, but was refused admission on the ground that his arm was beyond recovery. (This is his own statement. He might have been refused, on the ground that a suit of malpractice would result if he could procure witnesses against those who had his arm first in charge. The suit occurred later, but not favorably to him). Six months from the injury he applied at Howard Hospital, with an arm deformed, stiff and useless, but otherwise showing no evidence of the excessive pain and swelling that followed the injury. Pronation and supination were, in a degree, limited. Ether was administered, and the arm gently flexed and extended. The stiffness was mainly due to the condition of the muscles. Around the joint an anodyne lotion was placed, and in two weeks the same process was repeated. He submitted to this, under ether, eight times. At the conclusion of this he was enabled to make fair use of his arm, but it was nearly two years before it became useful to him. At this time he would have had every motion, if, in the first dressing, the radius had been replaced.

I would call attention to the character and severity of these injuries. The first was a separation of the condyles; the olecranon having been forced as a wedge between them, splitting them asunder. The second was a compound comminuted fracture; the injury inflicted by a runaway team. The third was tripped violently upon a hard floor, and received the force of the blow on the elbow. The fourth fell forty-five feet, fracturing the ulna, and displacing the head of the radius, dislocating the clavicle, fracturing the bones of the nose, and left unconscious for forty-eight hours. In all, the injuries were of a severe and aggravated character, and the prognosis certainly unfavorable. Two of them, fortunately, were under the care of Professor Hamilton, and received his personal attention. Two were under the care of men whose experience was meagre, and who, during the entire cure, made no efforts to reclaim the joints. In all of them the joints were stiff, sore, and useless, at the end of six months. In three the joint was but slightly reclaimed at the end of a year. In three the arm was not fully restored before two years. In all, eventually, the function of the joint was perfectly restored, and the patient would have had the entire range of

motion had the fragments been perfectly adjusted.

Simple fractures implicating this joint, *i. e.*, fractures that are not complicated with external wound, will, as a rule, recover without ankylosis. The milder variety seldom give any trouble. In a former article upon this subject I gave the result of seven cases that I had treated without passive motion, and thus proved that passive motion was not always required, and especially in the class that were attended with but a slight degree of inflammation. With this, as with all joints, the degree of inflammation must vary with the severity of the injury and the condition of the person injured. In the most aggravated cases the whole limb becomes swollen, often from the fingers to the shoulder, and so great at the elbow as to change the entire contour of the limb. Plastic effusion rapidly supervenes upon such injuries, and every tissue about the joint, from skin to bone, becomes infiltrated. This is the class of cases that give one most concern, that recover so slowly, and often so imperfectly, that find their way into the courts, and often place the physician and the healing art in the most unfair, unjust and undesirable of positions. So frequently has this occurred that it is the legal aspect rather than the surgical aspect of the case that is uppermost in the physician's mind.

A surgeon, speaking of injuries of this joint, said, "I hardly dare say how early I begin passive motion; I usually begin it the second day;" while another told me that it should never be delayed beyond the tenth day, lest the olecranon fossa become filled with plastic matter and render ankylosis inevitable. How strangely in contrast with this is the experience of Erichsen,\* who says of fractures of the condyles: "it is in these particular fractures that passive motion, if it be ever employed, may be had recourse to, a tendency to rigidity of the joint being otherwise often left. The motion should be begun in adults at the expiration of a month or five weeks, in children at the end of three or four weeks, after the occurrence of the accident."

For my own part, I cannot believe that early passive motion—*i. e.*, motion begun prior to the tenth day—ever saved a case from ankylosis. That some surgeons, following this plan, have never had an unfavorable result, I am fully prepared to credit; but I am forced, from experi-

ence, to think that they overrate the value of passive motion in the early stages of an injury. I have left the shoulder, after dislocation—the elbow and wrist after fractures—for six weeks without passive motion, too frequently, and that too with the happiest results, to accept it as proven that *early passive motion will prevent ankylosis*. It is the serious cases like those already described that must establish the rule of practice, and that call for the best judgment.

What then shall be the treatment of the severer cases in this class of injuries? Rest, absolute and unqualified rest! Rest, if necessary, of part and system. The more perfect and complete it is, the better are nature's teachings carried out. It is not alone necessary that the part should be placed at rest. It should rest in the most favorable position for a swollen and inflamed member. If the person is to walk about, the arm will give him least pain if supported in a sling, but in the severer cases, and when a reclining posture is practicable, the arm can have no better position than when extended upon a pillow.

The extended position has certain advantages in combating inflammation. It is the most favorable to the return of the blood from the part. In these cases the limb is greatly swollen, and the deep and cutaneous veins are taxed to their utmost to convey away the excess of blood. The flexed arm presents an obstacle to the freest return of the blood, and hence presents an obstacle to the early subsidence of the inflammation.

It is the position that is attended with least pain when there is great swelling present. Such a position gives the most room for the effusions that have been thrown out. Let any one who has had effusions into and about a joint recall the pain and sense of constriction any attempt to flex it gave him, and he will readily understand the reason why it is suggested here.

It is the position, too, in which the deep, strong fascia of the elbow and forearm are most relaxed.

It is the one the patient naturally assumes, and seems to be directed by nature and experience. Whatever position gives the patient most comfort, during the severity of the inflammatory process, may, as a rule, be assumed, and in this position every effort made to speedily check and reduce the morbid process. Rest, anodyne lotions, local depletion and sorbefacients

\* Erichsen, Science and Art of Surgery, vol., 1, p. 356.

have all their value, and, used with discretion, will yield good returns.

Still, the pertinent question confronts us, *When begin the passive motion?* In the milder cases there is no need for anxiety; they will all recover without surgical manipulation. In the severer cases *wait until the inflammation has measurably declined.* If the inflammation decline early and rapidly, there is nothing to fear. If at the end of two weeks the joint can be gently handled, rubbed, compressed by the surgeon's hand, without causing much pain; if at this stage there is but little pain, and the patient can attend to his daily avocation, there is nothing to fear of the ultimate restoration of the part. In this class of cases the patient will always begin to use his arm as soon as nature indicates it, and until that time arrives the more quiet it is kept the better.

But in the graver cases, the greater the amount of plastic effusion the longer and more persistent the inflammatory process; so will be the relative tardy return to usefulness. In these cases nature has hardly had time, in four weeks, to rally from the shock and immediate consequences of the injury. The inflammatory effusion so extensively thrown out must be removed by the same vital process that caused it to be poured out. Nature poured out this product for a wise purpose, and when its hour of usefulness has passed she will remove it, and until she has measurably completed her work she will not be tolerant of interference.

Hence, one cannot lay down any positive limit to rest, nor any exact period when passive motion should be began. I believe it is never judicious or necessary to begin it earlier than four weeks, and the discretion of the physician should decide whether passive motion should be instituted at that time or be deferred to the second or third month. Passive motion, began at the proper time and judiciously followed, will greatly assist nature, and that is all the physician is ever called upon to do.

The mode of restoration, when the proper time has come, is a matter of great importance. In the first place no brilliant results can be expected. So grave an injury, that has required months to repair, will require months to regain its full function. In not one of the four cases narrated was the arm useful before the expiration of a year.

When the pain and swelling have subsided, and the arm resumed its natural shape, the

patient may be assisted in regaining the use of the part. This may often be wisely preceded by the use of a good liniment, which, with the rubbing, has a far wider range of usefulness than is usually attributed to it. It promotes a healthier circulation, and thereby gives immediate relief. It aids the absorbents, and thus does permanent good; but its chief efficacy lies in the healthful influence it exerts upon the muscles. It is impossible to rub the arm without calling into play the fibres of the deep muscles. Even when the parts are exquisitely painful, a light, gentle friction to the skin is of great value; but when the design is to aid the deeper structures, a slow, kneading process may be resorted to, and this is not only always practicable, but is in many respects superior to electricity.

When passive motion is to be instituted, every care should be taken to disarm the fears of the patient. Fear alone may produce a muscular rigidity that will lead to very erroneous conclusions as to the true condition of the joint, a condition that often disappears when the patient is assured that no harm is intended. By adopting in the first attempts the gentlest manipulations, and satisfied with the slightest degree of motion, the confidence of the most timid patient will be secured.

To avoid doing any mischief, the effects of each manipulation should be carefully watched, and the frequency and degree of motion be regulated by this standard. In this, as in everything else in life, it is only the beginning that presents difficulties.

In extreme cases the work can be advantageously hastened by the administration of ether and the part freely moved. In these cases the amount of effusion, the long and painful character, and the tardy return to its normal outline, have given time for this plastic effusion to become organized, and this must be overcome. Under ether it can be done often very rapidly; but with the McIntyre splint it can be done just as effectively, and without much pain. I have long since ceased to fear a stiff joint, unless there is some unfavorable diathesis.

The foregoing cases offer some valuable material for reflection.

They were stiff and useless for a period ranging from six months to a year, and yet recovered with good motion. This is certainly at variance with quite a prevalent opinion that bony ankylosis will supervene upon fractures



involving a joint, unless the tendency to it is overcome by early persistent motion.

Every effort was made by Prof. Hamilton to prevent ankylosis, but in vain. Both cases defied his best-directed efforts; both became stiff, one for seven and the other for twelve months; and yet, without surgical aid, both fully recovered.

These four most aggravated cases show that a stiffness quite as effective as a bony ankylosis may prevail for a long period, and yet yield to nature's own laws. They show that joints in healthy persons may be fractured, and yet, after long disuse, recover fully their function. It has not been my fortune to meet with a single case of bony ankylosis from a simple fracture in a healthy person.

They teach one not to promise a speedy cure in bad cases, nor to look too gloomily upon the severer ones. I recall two cases of compound injury to the elbow-joint that made good recovery.

They teach that one may undertake to restore such a joint, after a year's disuse, with a fair prospect of success.

They teach that one can testify in court that an arm may still recover, though a year has elapsed from the reception of an injury.

They teach one not to be discouraged if at the end of six weeks passive motion is wholly ineffective or inadmissible.

They teach that there is a time when passive motion will do no good, and that there is a time when it will reward one's efforts.

They teach that if passive motion is neglected for six weeks, and stiffness follows, one cannot therefore say that it was occasioned by the neglect of the attendant, or that if it had been instituted earlier, and perseveringly continued, it would have been entirely arrested. (See first case.)

1328 Spruce street, Philadelphia.

## HOSPITAL REPORTS.

### BELLEVUE HOSPITAL, NEW YORK.

#### Excision of the Hip-joint.

Extract from Clinical Lecture by Prof. Lewis A. Sayre, M. D.

[Reported for the MEDICAL AND SURGICAL REPORTER, by N. W. Cady, M. S.]

\* \* \* CASE 2.—McLaren, Thomas, aged six years. Here is another in the same condition (the third stage of hip disease). I dislike very much that any patient should remain any longer

under the anæsthetic, whether it be ether or chloroform, than is necessary. Consequently, as soon as I find the child anæsthetized I commence the operation, whatever it is to be, as soon as possible.

The child is in the third stage of the disease, the same as the one you have just seen, not so far advanced but that you will observe the deformity of adduction, flexion and inversion. There is an unfortunate sinus on the inner portion of the thigh, from which I remove some of this peculiar flaky slough of connective tissue. I am inclined to think that the ilium is more diseased than the head of the femur. I take a point midway between the anterior superior spinous process of the crest of the ilium and the trochanter major; at that place I drive the knife firmly down to the ilium, and then go in a curved direction, midway between its centre and the posterior border, over the top of the trochanter major, curving it forward in a line like the belly of a D, making the incision from four to six inches in length, according to the age of the child. I divide the periosteum firmly in the line of the incision. If you are not positive that you have divided the periosteum at the first incision, make the knife traverse the same line until you are sure that the periosteum is divided to the bone. In making this incision, you will observe that I go through a large abscess. I then take a long curved bistoury, and going in the wound beneath the soft tissues, divide the periosteum in a line transverse to my first incision, as far around the bone as I can reach, in this manner. Now I peel off the periosteum with an elevator.

Some gentlemen have asked me what I am doing; that they cannot see. Well, I cannot see myself. I have an eye on the end of my finger, and that intelligent organ, aided by this spatula, is feeling its way around this bone. It is simply a matter of feeling, that is all. I notice that there is destruction here of the whole front part of the ilium.

[The forceps were here applied to a portion of the diseased bone, but though some force was used the piece failed to come away.]

There is something very curious here. The bone is pressed very firmly in the involucrum around it, and I want to save all that I can. There is an involucrum about the bone, the head is all gone, and the acetabulum is perforated.

[A second application of the forceps brought away the head of the femur, which had been sawed off below the trochanter minor. The firm fixation by the involucrum of new bone had caused the difficulty in extracting it.]

Here is the head of the bone. This is a very instructive case for you, gentlemen. Now you can see at once the utter impossibility of ever replacing the limb in proper position, if we had permitted it to go on by nature's process of curing it.

Now, the dead bone having been removed, and the involucrum which surrounded that dead bone being left, we set about getting his

leg in proper position. We now put him in this cuirass, which is made of wire, in shape not unlike the posterior half of a suit of clothes, with head piece and all. I put some oakum under the seat, for the purpose of keeping it from getting soiled. We now put the child in the cuirass, with a bit of soft cloth between the cuirass and his body. An important point is to have the anus directly over the opening in the cuirass; then the foot piece is swerved down until it fits his well foot properly. He has his well foot now in proper position against the foot-board; a soft pad of cotton is put over his instep, to prevent chafing, and a roller bandage is applied. Before going over the knee I cover it with a layer of cotton, and then with this piece of folded newspaper, pasteboard, or anything to support the leg, and follow it up with the roller bandage. What do I put it there for? It is for the purpose of preventing motion of that knee-joint and thigh. Thus I have a splint in front and the cuirass between, so that when the bandage is applied he is, as it were, perfectly solidified with regard to that leg. Having done that, I carry the bandage up the thigh and then put some cotton in the perineum, and then I carry the bandage over the upper part of the handle of the cuirass, in such a manner as to hold the perineum perfectly firm. It is impossible now to get motion at that knee.

Now the well leg is dressed, as a means of preparing him for securing the sick leg, to which we now turn our attention. We wipe it dry, and apply some strips of adhesive plaster along either side, and secure these to his leg by a roller, leaving, as you will observe, the lower ends perfectly free, and of sufficient length to go around the foot piece. The adhesive plaster is carried well above the knee, and is secured by a roller. It must be carried well above the knee-joint, otherwise you are apt to produce injury to the lateral ligaments. We go up as far as the thigh, and then reverse the plaster strips, securing them, as before, with a roller.

We have now got our extending force applied. We therefore bring the child's foot down against the foot-board, and carry these adhesive strips around it and secure the foot to the foot-board, which you will observe has been screwed up to match the shortened limb. I now make extension on the foot by degrees, waiting for a moment to allow these muscles, which have been so long contracted, to yield. You recollect the leg was adducted, flexed, and inverted. I have taken away the cause of its fixation, and am now endeavoring to restore it to its proper position. If I attempted to extend it too suddenly, I should fail. I do this slowly and by degrees, for it is sometimes necessary to even divide, subcutaneously, the tissues before they can be induced to yield at all. Having now got this limb in a good position, I proceed to secure it with a roller bandage, in the same manner as I secured the other knee, with pads about the knee and foot, to relieve pressure.

Now we are ready to pay attention to the wound. I first pour the wound full of an antiseptic, Peruvian balsam, taking care that it penetrates every part of the wound. Next I take a piece of oakum, and, after saturating it with the antiseptic, carry it down to the very bottom of the wound and leave it there. Now, having filled the wound with oakum, and after placing this large pad of the same material over all, for the purpose of absorbing fluids, I bandage the whole firmly, and our dressing is completed.

[The child was able to be carried about in its "wire clothes" without the slightest inconvenience, and shortly after the operation was put in a carriage and sent to its home, on 21st street. We will give notes of its condition in the future.]

## MEDICAL SOCIETIES.

### CLINTON COUNTY (IOWA) MEDICAL SOCIETY.

The Society met at Gates House, De Witt, October 3d. In absence of the President, meeting was called to order by the Vice President. Minutes of last meeting were read and corrected. Several applications for membership were presented and acted upon. Dr. Langun, of De Witt, presented a case successfully operated on for epithelial cancer.

Dr. P. J. Farnsworth presented a report on the International Medical Congress, which he attended as delegate.

A lively Berkshire pig, of about four weeks, was brought before the Society for the determination of sex. It had the external marks of a vagina and urethra; it also had two well-developed testicles, and, to all appearance, a well-formed penis. The opening into the bladder seemed to be through the female organ. Observation was requested, and a report at a subsequent meeting.

Dr. A. B. Morgan read a paper on "Ununited Fractures," with details of several cases. One in a man of fifty, who had three fractures of the tibia. The upper and lower ones united, and the middle one did not. The man was put on good diet and phosphates, without any result. On inquiry, it was found that when the fracture first occurred the man's wife was just approaching her confinement; that since, what with good living and idleness, his desires had increased, and his connections had been with his wife as often as two or three times each night. Cohabitation was prohibited, and in less than two weeks union took place.

Dr. A. J. Hobart reported operation on two cases of encephaloid cancer

Dr. Morgan reported a case of injury to a man aged sixty-two. He was attacked by a bull, whose horn entered the abdomen just above the crest of the ilium, passing under the muscles and peritoneum, tearing across to the left hypochondriac region. The parts were brought

together, the peritoneum united with three silver sutures, the superficial fascia by several silken sutures. The external sutures were removed in three weeks. A small slough occurred at the right side, but the greater part united by first intention. In six weeks the man had so far recovered as to be on the street. The silver sutures are still in the peritoneum. Carbolic acid and linseed oil were used as a dressing.

Diphtheria was reported as prevailing in the eastern part of the county, at Clinton, and at the centre, at DeWitt, and in the north part; about forty cases in September, with eleven deaths. Scarlatina had made its appearance in Clinton and DeWitt. The general health of the county was reported good.

Dr. C. H. Lothrop, of Lyons, was requested to compile a medical history of the county, in aid of which it was ordered that each physician report what history of facts they could by December.

Appointments for next meeting were made, and the Society adjourned to meet in Clinton, Jan. 4, 1877.

H. S. FARNSWORTH, *Secretary*.

#### NEW YORK PATHOLOGICAL SOCIETY.

Stated meeting, October 11th, 1876. Dr. Charles K. Briddon, President, in the chair.

##### Morbus Coxæ—Exsection.

Dr. Lewis A. Sayre presented specimens of hip-joint disease removed by exsection.

The first case was a boy, aged six years, who had been complaining for four years. When seen the limb was ankylosed and at an angle of forty-five degrees. Exsection was performed and the child subsequently did well.

The second case was a child four years of age, who had been injured by a fall three and a half years before, and had been complaining ever since. In June last an abscess had formed on the side of the thigh. The limb was abducted. Exsection was performed; great difficulty attended the operation, which lasted one hour. It was found that the acetabulum was perforated; through this opening the head of the femur had become engaged, and was wedged in, so that after section it became necessary to use great force in extracting the necrosed portion. Dr. Sayre stated that these were the sixty-third and sixty-fourth cases respectively of exsection of the hip-joint performed by him.

Dr. Finnell asked Dr. Sayre if he did not think that in many cases of hip-joint disease the operation was performed at too early a period of the disease. He referred to specimens which had been presented at different times before the Society, where abrasion only of the articular surfaces of the bones could be detected.

Dr. Sayre agreed with Dr. Finnell, and said that the operation was indicated only after the appropriate extension treatment of the joint had failed, and when it had become disorganized.

##### Tænia Solium.

Dr. Beverly Robinson presented a specimen of tænia solium. It was passed by a woman, aged thirty-five, a cook by occupation. Her appetite would often become voracious. The administration of the ethereal extract of the oil of male fern had produced expulsion of the worm. Dr. Robinson had observed that cooks were liable to this disease.

Dr. Peters said that he usually gave the male fern in powder, with good results.

Dr. Briddon said that he used the ethereal extract of the oil of male fern, prepared by Merck, of Vienna. Twenty-four hours before administering the drug he gave a black draught and fed the patient on beef-tea, and twelve hours after (*i. e.*, before giving the male fern) he exhibited a dose of castor oil.

##### Aneurism of Arch of Aorta—Rupture into Trachea.

Dr. Mason presented a specimen of aneurism of the arch of the aorta, and read the following history:—

A woman, aged fifty, was first seen by the doctor on August 31st, 1876. She complained of pain in the region of the scapula, and suffered from cough, dyspnoea and stridulous voice. The pain was felt more keenly after eating. There was dullness of the left side of the chest anteriorly, and the action of the heart was enfeebled. No aneurismal bruit could, however, be detected. She died of rupture of the sac into the trachea.

*Post-mortem*.—Aneurism of the arch of the aorta was found, having ruptured into the trachea and being adherent thereto. The left pleura contained blood. The right pleura was adherent to the lung, and the latter was increased in size. The peculiarity of this case was the absence of special physical signs.

Dr. Briddon referred to a case of aneurism of the innominate artery, in which no bruit had been detected, though impairment of the voice was quite marked.

##### Tumor of Inferior Maxilla.

Dr. Post presented a specimen of what he considered an epithelial cancer of the lower jaw. He had removed the tumor from a woman aged sixty-six. It had first commenced at the lobe of the right ear, and had extended forward to the ramus of the jaw, dipping down behind it; was slightly movable, but had no connection with the carotid artery. Dr. Heitzman believed the tumor was a sarcoma.

##### Rupture of Uterus.

Dr. Finnell presented a specimen of rupture of the uterus. This was a coroner's case, in which a doctor had been charged with killing the mother and child. The woman had been twenty-four hours in labor. The os was slightly dilated and the head of the child protruded. Version had been performed. Death had resulted from post-partum hemorrhage. At the autopsy rupture of the uterus was found to have occurred near the cervix, measuring two and a half inches.

## EDITORIAL DEPARTMENT.

### PERISCOPE.

#### On Dilatation of the Uterus.

Dr. Lombe Atthill, in his address on obstetric medicine before the British Medical Association, says:—

I am well aware that by some practitioners the dilatation of the uterus is still looked on with dread, and that the attempt, if made at all, is undertaken with the greatest hesitation. I can only say that I believe these fears to be groundless, and that, if due care be taken to select suitable cases, and proper methods of carrying out the process be adopted, the treatment is as safe as well as justifiable one. My own experience in the dilatation of the uterus has been great. I have practiced it very frequently, indeed, during the last ten years, and as yet, in no single instance has a bad symptom followed, nor have I even once been compelled to abandon the attempt. But I am far from throwing doubt on the accuracy of the statements made by others, who have recorded the occurrence of alarming symptoms, or even of death, as consequent on the attempt to dilate the cervix uteri; and I am quite prepared for the possible occurrence of such, for all are aware that cases must occur in which the most trifling exciting cause will be followed by serious symptoms, though no grounds existed beforehand for anticipating the occurrence of such. But these are exceptional, and I believe, as a rule, that when serious symptoms arise, either during the process or in consequence of dilatation of the cervix uteri, they do so either because an unsuitable subject has been selected in whom to practice the treatment, or an unwise method adopted for carrying it out. On examining the records of the cases in which serious or unpleasant symptoms followed the attempt to dilate the uterus, I find they have generally occurred when practiced—

1st. Either for the relief of dysmenorrhœa depending on the existence of a narrow cervical canal;

2d. When the cervical canal is encroached on by a fibroid of large size and unyielding structure;

3d. When the process has been attempted to be carried out rapidly by means of metallic dilators, or,

4th. When it has been protracted over several days.

I have, therefore, in order to guard as far as possible against the serious results recorded by others as following attempts to dilate the uterus, laid down for myself the following rules, which I can recommend with confidence to others:—

1. Never to dilate the cervix uteri for the

cure of dysmenorrhœa or sterility depending on a narrow cervical canal or conical cervix.

2. Never to dilate in cases in which a large and dense intramural fibroid presses on and partially obliterates the cervical canal.

3. Never to use metallic dilators of any kind, but to choose for the purpose either sponge- or sea-tangle tents, which expand slowly and gradually.

4. Never to continue the process of dilatation for more than forty-eight hours. I prefer, in the few cases I have met with in which, after the lapse of that time, the cervix was not sufficiently opened to suit the purposes I had in view, to postpone all operative interference for some weeks, rather than risk the result by prolonging the dilating process.

With respect to the first of these rules, I look upon the treatment of what is termed "mechanical dysmenorrhœa" by dilatation as altogether a mistake. I doubt if any permanent benefit has ever resulted from it; while in several cases grave symptoms, and in one death, have, to my knowledge, followed the attempt. Equally, it is of importance not to prolong the dilating process. My own experience in the treatment of uterine disease requiring dilatation leads me to this conclusion, that unpleasant symptoms are likely to occur in a direct ratio to the length of time over which the process of dilatation extends. Again, I have known death to follow the attempt to dilate the uterus in a case where a large fibroid of dense structure, giving rise to menorrhagia, and causing intense pain, was developed in the uterus, and encroached on the cervical canal. In such cases dilatation is doubly objectionable, because the process is useless as well as dangerous; useless, because you will generally find that any attempt at operative interference from the interior of the uterus will be impossible; and dangerous, because inflammation is liable to follow, and that, too, in patients in the worst possible condition for resisting the attack.

#### **Retro-Globar Aneurism with Marked Exophthalmus, Treated by Ligation of the Carotid Artery.**

Translated from the French by John B. Roberts, M.D., of Philadelphia.

A miner was buried by a falling mass of coal; there followed severe pain in the head, and twenty-four hours later there was developed a rapidly increasing murmur in the left temple. Gradually marked exophthalmus occurred, without loss of vision, there was slight chemosis and hyperæmia of the conjunctiva, the upper lid was raised imperfectly, and the globe was pushed downward and inward. At the same time the movements upward and outward of the eyeball were limited. By pressure,



the globe could be temporarily and partially returned into the orbit, while pulsation and thrill could be distinctly felt. Pressure upon the left carotid artery was followed by disappearance of the exophthalmus and cessation of pulsation and thrill, all of which recurred when pressure was removed. The diagnosis made was that of diffuse aneurism posterior to the globe; and digital and instrumental compression was diligently applied for ten weeks without result. Finally, ligation of the carotid was determined upon, and was done by the antiseptic method, with carbolized catgut ligature. There was some temporary headache and vertigo, but the wound healed by first intention. Pulsation disappeared, though a slight murmur persisted, and gradually the protrusion of the ball diminished, and its movements returned, though there was transient diplopia.

In six months everything was not absolutely normal, but the cure of the patient seemed assured. There was still a slight murmur, which could be arrested by compressing the right carotid, but this provoked vertigo and swooning, and, therefore, could not be tolerated. The left superior thyroid was greatly developed, and compression there also caused cessation of the murmur, but it was not considered that ligation of that vessel was indicated, because the collateral circulation was very much developed. Dr. Nieden, in a similar case, would only try digital compression for five or six hours before ligating the carotid, in order to avoid too great development of this collateral circulation. The author cites operators who have had negative and positive results from digital compression, and gives the following statistics of the results of ligation of the carotid, without regarding secondary complications:—

79 cases,	or 69.9 per cent.,	cured.
14 " "	12.3 "	without change.
7 " "	6.3 "	improved.
13 " "	11.5 "	deaths.

—*Annales d'Oculistique*, lxxv, p. 260 (1876),  
from *Klin. Monats. für Augenheilkunde*.

#### The Alkaloids of Ergot.

In his late address before the British Pharmaceutical Conference, Prof. Redwood, speaking of ergot, says:—

There has been a long-standing inquiry, with many experiments from time to time made, for the purpose of ascertaining what is the active therapeutical constituent of this drug. The ergot yields to ether about 30 per cent. of a fatty substance, partly consisting of fixed oil, partly of volatile fatty acids, and partly of resinous matter. This ethereal extract was considered by Dr. Wright to be the efficacious part of the ergot, but Neidhardt ascribed the efficacy it possessed to the resin, while others have represented that the fatty matter not only is devoid of hæmostatic properties, but possesses others which are poisonous. From the part of the ergot insoluble in ether but soluble in alcohol, Wiggers extracted his ergotine, which

Ludwig represents as modified albumen, insoluble in water, but soluble in alcohol and in caustic alkalies. Bonjean, again, denied the medicinal efficacy of Wiggers' ergotine, and claimed that property and the name for an extract made by percolation with cold water, and evaporation to the solid state after removal of albumen by heat and precipitation of other inert matter by means of alcohol. Subsequently Wenzell obtained two alkaloids, which he has named eboline and ergotine, both of which are described as soluble in water, with an alkaline reaction and bitter taste. More recently still, Tanret, in a paper read before the Academy of Sciences of Paris, claims to have discovered another alkaloid in ergot, which for distinction he has named ergotinine. It exists only in very small quantity, is strongly alkaline in its reaction, and capable of neutralizing acids. The presence of methylamine at one stage of the process by which this alkaloid is obtained, and the further development of the same amine by the action of potash on the ergotinine, are suggestive facts which will no doubt lead to further investigation. Lastly, we have the announcement, by Dragendorff, that the active principle of ergot is not an alkaloid but an acid, which he names sclerotic acid, and which is present in ergot to the extent of two or three per cent. of its weight. Now, in the face of these various, and to some extent discrepant, results of the attempts made to discover and isolate the active principle of ergot, we may be satisfied for the present to rely on the use of less definite preparations, such as the powder, decoction, or liquid extract.

#### Therapeutic Uses of Iodoform.

Dr. Lazansky states, as quoted by the *Practitioner*, September, 1876, that the chief modes in which iodoform is employed at present are first externally, in the form of ointment, half a drachm or a drachm being mingled with one ounce of some fatty substance, or in the form of powder, the part on which it has been sprinkled being then covered with a cloth dipped in glycerine, or in the form of a suppository or pessary; and secondly, internally, in the form of pills combined with iron, of mixture in almond emulsion, or of subcutaneous injection. Lazansky had the opportunity of seeing its beneficial effects in Professor Pick's practice when applied to syphilitic ulcers in the early stage, to ulcerations after buboes, to moist papulæ, to ulcerations after cutaneous gummatæ, ulcers of the feet, etc. Pick employed it in the form of an æthereal solution in the proportion of 1.15 in a mixture of glycerine and alcohol (iodoform 3, alcohol 10, and glycerine 30, parts), and in the form of pills, each pill containing  $1\frac{1}{2}$  grain, and about six or eight being given per diem. Iodoform has no action on the indurations that follow syphilitic ulcers. When first applied iodoform produces a sharp sensation of burning, which quickly passes away and is less strongly perceived when it has

been frequently applied. Inflammatory phimosi following ulcers is rapidly cured by the sprinkling of iodoform in suspension. It is very useful when applied to condylomata, the projecting warty masses drying up and becoming friable, so that they could be rubbed off with the fingers. The symptoms of general syphilis quickly disappeared under the internal use of the medicine. The injurious effects of the remedy observed were diarrhoea, menorrhagia and repeated attacks of iodine acne.

#### The Diagnosis of Auditory Vertigo.

In an article on this subject before the British Medical Association, Dr. W. R. Gowers stated that the subjects of auditory vertigo, besides their acute paroxysms, are usually liable to slighter but more continuous sense of disturbed equilibrium, taking the form not of a definite movement, but merely of vague instability, and this is in constant relation to the gastric function. The slightest stomach disturbance at once excites the feeling, and careful dietetic management is necessary to keep the patient free from it. Among the points to be specially attended to in diagnosing auditory from pure gastric vertigo are the following. The occurrence of intense paroxysms of vertigo, especially if repeated, is in favor of their labyrinthine origin. In many forms of vertigo, paroxysms occur, but in none so intense as in this form. The character of the sensation is of great significance. When purely gastric, it is usually indefinite; and labyrinthine vertigo is usually definite. There is a sense of movement in a certain direction usually uniform. Often there is actual movement. Lastly, evidence is usually to be obtained of affection of the auditory nerve or apparatus—unilateral, or greater on one side than on the other—tinnitus and deafness. The deafness may be due to atmospheric vibrations, or to those conducted through the skull. The latter, a well-known symptom of labyrinthine disease, is of great service in the diagnosis of auditory vertigo. Two illustrative cases were narrated. In the first, characteristic auditory vertigo coexisted with some other affection of cranial nerves, interference with smell and taste, etc. The patient suffered also from chronic ulcer of the stomach, and the gastric disturbance excited paroxysms of vertigo. The patient always fell to the right and backward, and the right ear alone presented perverted function. Although the special gastric association in this case was accidental, the confusion in diagnosis to which it gave rise was typical, and was only cleared by careful investigation of the form of the vertigo. In the second case, a gentleman aged thirty-five suffered from slight dizziness, with dyspeptic symptoms, to which he ascribed it. On examination, however, there was clear evidence of labyrinthine mischief, and a history of paroxysms of vertigo most characteristic in form. In these he fell to the right, the auditory affection being on the left side. He fell with such violence as to knock

down a friend who was on his right side. In other attacks, objects seemed to move from the right, although he did not fall. One severe paroxysm was excited by a hearty meal after long fasting.

#### Deafness from Post-Nasal Catarrh.

Mr. Lennox Browne, F.R.C.S., read a paper before the British Medical Association, in which he observed that among the commonest forms of deafness is chronic non-suppurative inflammation of the middle ear, which may be subdivided into catarrhal and hypertrophic, or proliferous. The former is the most curable, and invariably originates with chronic post-nasal catarrh, which extends along the Eustachian tube to the middle ear. The author of a recent work, the first specially devoted to diseases of the nose, does not refer to impairment of hearing as an almost invariable accompaniment of nasal catarrh, and yet few people have a simple head cold without some dullness of hearing, though it is often not recognized, because not looked for. Many remedies are in vogue, some useless, and others directed only to one of the conditions; thus, if it be sought to relieve the dryness common in these cases, the other extreme is often arrived at, while, if it be attempted to check the amount of secretion by astringents, the dryness is but increased. The practitioner's object must be to render the secretion more healthy in both quality and quantity. Steam inhalations by mouth and nose are of the greatest service to this end. If there be painful inflammation, benzoin, with or without chloroform, is most efficient. If a stimulant be indicated, benzole, creasote, and pine oil, with aldehyde, are the best suited. The author drew attention to the absurdly unnecessary number of formulæ for stimulant-inhalations, given in a special *Pharmacopœia* for throat diseases, and asserted strongly that such needless enumeration could have no end but to embarrass the practitioner. The patient during inhaling should be instructed to practice the Valsalva method of inflation, and Politzer's inflation might also be concurrently employed. Frequent catheterization of the Eustachian tube was unnecessary, and in the author's opinion positively harmful. The anterior nasal douche of Weber was most useful in some cases, but it was generally commenced too early in the case. It frequently caused pain, and sometimes increased or induced deafness, and in other cases failed to reach the seat of disease. The first of these objections might be obviated by regulating the quantity, specific gravity, temperature, and frequency of employment of the douche; but in some instances this method was decidedly harmful, and they were only cured by the post-nasal douche, as largely employed by American physicians. The author considered carefully the evidence of Drs. Roosa and Elsberg for and against the use of the anterior nasal douche, and quoted cases in his own practice which had led him to concur with the former.

## REVIEWS AND BOOK NOTICES.

## NOTES ON CURRENT MEDICAL LITERATURE.

—It is said of Galen, that since the Sixteenth century there have been but two complete editions of his works: that of Chartier, which also included the Hippocratic treatises (1630-1679), and that of Kühn (1821-1833), neither of them satisfactory. At length, however, we are to have a Galen which shall take rank with the two classic editions of Hippocrates, that of Littré and that of Emerins, and in Professor Müller's amended Greek text, or his (on the whole) accurate Latin version of it, the scholarly physician can instruct himself with ease and comfort as to the doctrines of the medical autocrat of the middle ages.

—The address of Dr. Thomas M. Drysdale, before the Medical Society of the State of Pennsylvania, is largely historic. We quote one passage which we believe is pretty nearly correct:—

"Can we really learn more in Europe than in this country? As late as twenty-five years ago this would have been answered most decidedly in the affirmative; but now, except in a few special studies, we can truthfully assert that our facilities are equal to theirs. What has been said in regard to our institutions need not be repeated, but it may be affirmed, that our city rivals, as a place for medical instruction in all the practical branches, any other city in the world.

—"The Forceps in Breech Deliveries, with a Description of a New Instrument," is the title of a paper from the *Transactions* of the Ohio Medical Society, by A. J. Miles. The instrument is a "breech forceps" of ingenious construction.

## BOOK NOTICES.

**A Century of American Medicine, 1776-1876.** By Edward H. Clarke, M. D.; Henry J. Bigelow, M. D.; Samuel D. Gross, M. D., L. L. D., D. C. L.; T. Gaillard Thomas, M. D., and J. S. Billings, M. D. Philadelphia, H. C. Lea, 1876. 1 vol., cloth. Small 8vo, pp. 366.

This excellent summary of medical progress in the United States during the last hundred years has been compiled by very able hands,

as the above list of names abundantly testifies. Each takes a separate department: Dr. Clarke, Practical Medicine; Dr. Bigelow, The Discovery of Anæsthesia; Dr. Gross, Surgery; Dr. Thomas, Obstetrics and Gynecology; Dr. Billings, Literature and Institutions. The utmost brevity is observed, indeed, often to the extent of rendering the narrative a rather dry list of facts. These, however, are most carefully collated, and with abundant references to the sources of information, so that he who would push his studies further can find the direction in which to work.

A very thorough index would have added vastly to the worth of the book. It has none at all.

**Transactions of the Texas State Medical Association.** Eighth annual session. 1876.

This well-printed volume, filled with a number of meritorious contributions to science, is highly creditable to the Texas Medical Association. We may enumerate some of the articles which have impressed us as the more interesting: one on the Hymen, by Dr. S. R. Burroughs; on the Indigenous Medical Resources of the State, by Dr. A. R. Kilpatrick; on the Anatomy, etc., of the White and Negro Races, by Dr. W. J. Burt; on Dislocations of the Humerus, by Dr. Greenville Dowell; on Retained Fœtus, by Dr. A. E. Ford; on a Case of Double Vagina, by Dr. J. W. Fennell; on Tracheotomy and Lithotomy, by Dr. B. F. Eads; and a prize essay on the Eucalyptus Globulus, by Dr. Richard Bibb, in which he has collected a vast amount of information about that interesting tree.

**Hygeia, A City of Health.** By Benjamin Ward Richardson. London, MacMillan & Co. Paper, pp. 47. Price 30 cents.

This is a curious and fanciful portraiture of a city in which all the precepts of enlightened sanitation are observed. We quoted from it when its author delivered it last year before the Social Science Association. Since then the English papers state an actual attempt has been put on foot to realize the philanthropic dream. This gives still more interest to it, and those who have the duties of attending to the public health upon their shoulders will do well to read its pages. Although they will not always agree with the talented author, they will have to thank him for suggestions as to means and a clear insight into ends.

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D. G. BRINTON, M.D., EDITOR.

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#### THERAPEUTICS AS A LOCAL ART.

Pursuing the reflections on therapeutics which we commenced two weeks ago, we may recall that the "basis of therapeutics" was there defined to be nothing else than observations of the effects of medicines administered in diseased conditions. Such observations require, of course, to be classified and qualified according to the approved methods of inductive logic. Last year we gave a series of articles explaining the application of these methods to medicine, and we showed that it was largely owing to an ignorance of them that so much of medical literature is of no real value.

An instance of this may be recalled. Experience is a sure guide only when it can be applied under identical conditions. In a game of pure chance no amount of experience adds a particle to the probability of success on one or the other side, because the determining conditions are unknown. Now, in every case of disease there are always a certain number of con-

ditions unlike those of every other case of (nominally) the same disease. As this number is larger, the experience brought to bear in the treatment is of less value.

Among these conditions, those of personal idiosyncrasy, sex, age, diathesis, temperament, stand first; then those of race, climate, occupation, habits, and surroundings generally. These latter are so powerful that it is a subject of serious doubt whether just the same treatment in any disease would bring the same results the world over. Certain it is that the most eminent clinical teachers of Europe are not the best guides in this country. This constitutes a serious objection to the too ready acceptance of their dicta on this side the Atlantic. Dr. J. A. LARRABEE very forcibly and very justly says, in the *Transactions* of the Kentucky State Medical Society, 1875 (page 99): "Few practitioners of experience in this country would be beguiled into the treatment of pneumonia, typhoid fever and scarlatina laid down by German authors in 'Ziemssen's Cyclopædia of Medicine.'" Yet, doubtless, enough inexperienced men will follow the methods advocated in that work to render its translation, on the whole, detrimental to the progress of sound therapeutics in the United States.

The popular prejudice which prefers a native-born physician, "one who knows the diseases of the country," is a just one. The profession of medicine is, as Erasmus called it, a *Vaticum ubique terrarum*, but at the expense of the patient. It was acknowledged by the French surgeons in the Italian campaign, 1848-50, that their success with their own soldiery was much less than that of the Italian doctors, although in Algeria they were on a par. Nothing is more natural. Dr. L. A. DUHRING, who has studied so closely, both in Europe and this country, the diseases of the skin, states emphatically that the same nominal lesion is markedly different in the two continents. The effects of the cinchona alkaloids on the prophylaxis and treatment of malaria are unquestion-



ably widely different in temperate] Europe, tropical Africa and the Lower Mississippi. The observations of the English surgeons leave no doubt of this. The hot debates about alcohol in disease never can decide any general principle, for it is notorious that race and climate modify, in the most striking manner, the influence of that substance. The utter discrepancy between the mercurial and non-mercurial therapeutists of syphilis respectively at the south and north of Europe, "all honorable men," must have some unrecognized condition of race to explain it.

In the above we have said nothing of a "change of type" in disease, which, if it does take place, certainly cannot do so over the whole world at once and with equal progression. Nor have we adverted to the changes in the drugs administered, due to the varied forms in which they are given, the action upon them of thermometrical and hygrometrical conditions, etc. All these come in to give a local color, and that a decided one, to the results of what seems similar medication.

We pass over these in order to expose more prominently the conclusion we wish to present. It is briefly this:—*Therapeutics is and must ever remain to a large degree a local art.* No one great university will ever define its principles for the civilized world. Foreign writers are not trusty guides in treatment. We must cultivate a home literature, home schools, home doctrines. The profession in Australia, in Costa Rica, in the United States; has in each the arduous labor of working up its own therapeutics in order to have it what it should be. Each separate physician must study his surroundings, and modify what he hears and reads by the dictates of his own observation. If because he reads that an eminent German physician treats all his typhoid patients with abundance of calomel and cold water with great success, he feels impelled to do likewise, he shows little wisdom in departing so far from the local customs of treatment. These have grown up as

indigenous results of experience, and to root them out in order to put exotics in their place is folly. Physicians of discretion will prefer the medical books and journals of their own country to reprints and translations from abroad; this preference, in turn, will encourage native authors to more devoted labor, and important results will be more quickly achieved; the profession will thus be more highly educated in practical science; and the public will be benefited just in that proportion.

## NOTES AND COMMENTS.

### Fat Meat as an External Application.

In the *Virginia Medical Monthly*, Dr. W. T. Ennet, of North Carolina, relates the following experience in diphtheria:—"My aunt, who was in Hartford two years ago, when the disease was raging so terrifically there, being at my house this summer, when it was killing whole families in Wilmington, and was also terribly fatal to the surrounding country, asked me to try the Hartford doctors' treatment, which was the same as ours, with the exception of external application of 'fat meat.' I could not nor cannot see the virtue, but promised to try it; I used it, and my patient got well. I still did not look upon it as affecting the disease at all. I used it again and again, and the patients all got well. I tried to study out some physiological action, but could not. I wrote to an eminent physician in Hartford, and he writes me, 'We regard it as an old woman's remedy; but the doctors all use it, and since its use the mortality has not been more than one-third. What it is and why it is, I don't know; but might it not have some antidotal action on the poison?' Since then, I was called in consultation in the adjoining neighborhood, where the attending physician had lost three or four in the one family, and another patient was almost dead. I was almost ashamed to recommend my fat meat, but I did it, and the child got well. Of course, we used all other necessary treatment. I certainly did not rely upon it alone; but, as it cannot possibly do any harm, I shall continue to use it as an external application."

Professor J. Lewis Smith, of New York, considers fat salt pork to the throat very valuable in anginous scarlatina. He finds it a safe

and efficient counter-irritant, so decided in action that some skins cannot support it but for a short time.

#### The Management of Chlorotic Anæmia.

We learn from the *London Medical Record* that in this disease in young girls M. Beaumetz is much better satisfied with gymnastic exercise and hydrotherapy than with ferruginous medicines. Moreover, if the latter are oftener powerless in chlorosis, they produce harm by disturbing the digestive functions. Arsenic is of more value than iron.

M. Moutard-Martin considers that ærotherapy, in the form of baths in compressed air, is even better than the hydrotherapy proposed by M. Beaumetz.

The following is a favorite formula with English practitioners:—

R. Ferri redacti,	3j	
Canellæ pulveris,	3ss	
Aloës socotrinæ,	gr.vij	
Extracti taraxaci,	q. s.	M.

Divide into thirty pills, one to four a day in chlorosis accompanied by constipation.

#### Hydrate of Chloral in Puerperal Convulsions.

Dr. Chouppe states, in the *Gazette Medicale*, having had the opportunity of observing carefully a considerable number of cases of puerperal convulsions, he has come to the conclusion that, of all the means we possess, the hydrate is the most reliable for treating this disease. In twelve cases in which it was alone employed the termination was successful, although in some of these the state of things seemed desperate when it was commenced. He thinks, indeed, that it should be resorted to even before the disease becomes confirmed, whenever the woman, exhibiting albuminuria and œdema, complains of headaches, singing in the ears, hallucinations of vision, restlessness, cramps, or vague pains in the limbs, etc. When there is trismus present it should be given in enemata, which have also the great advantage of being able to be given during the paroxysm. The doses will vary according to the tolerance of the patients and the severity of the paroxysms, but it is necessary to commence with a pretty strong one (especially if the paroxysms are violent and close upon each other), in order to make a powerful and quick impression. After a calm has been obtained, and if the attacks do not recur, some smaller

doses may be given during the next twenty-four hours or so; but if the attacks recur, large doses must again be resorted to until the paroxysms have completely ceased. In an enema we may always begin with thirty grains, repeating this at the end of ten minutes; and by the mouth at least forty-five grains should be given at once, fifteen grains being repeated every quarter of an hour. In a violent attack the dose required will vary from 120 to 180 grains; and it may even be requisite to resort to hypodermic or intravenous injection. In all cases it is of importance to get at least sixty grains rapidly taken, and to prolong the use of the chloral for a tolerably long time after the cessation of the convulsions.

#### Fluid Extract of Hydrangea Arborescens.

This valuable remedy, first introduced by the late editor of this journal, may be prepared by the following formula, given by Dr. John King:

R. Hydrangea root,	
powdered finely,	3xvj
Alcohol,	
Diluted alcohol,	aa q. s.

Moisten the powder with alcohol; after twenty-four hours pack it into a percolator, and add enough alcohol to obtain twelve ounces of percolate, and set it aside. Then add diluted alcohol until the root is exhausted, evaporate this to four fluid ounces, and add it to the twelve fluid ounces first obtained, so as to make one pint of fluid extract.

In the absence of an authoritative formula, the syrup of hydrangea might be made by mixing two fluid ounces of the extract with fourteen fluid ounces of simple syrup.

#### A Formula for Ergotin.

The following formula is offered by Mr. Charles L. Mitchell. He states that after numerous trials he can say that it yields a result in every way satisfactory:—

R. Ergot, in fine powder,	3viiij
Acetic acid,	f.3ij
Alcohol,	f.3iv.

Moisten the ergot with a mixture of the acid and eight fluid ounces of water; let it stand twenty-four hours; pack in percolator, and exhaust with water; evaporate to four fluid ounces, add the alcohol, let it stand several hours, filter and evaporate to an extract. Result, about 480 grains; one grain is equal to eight grains of ergot.

**Transmission of Measles to the Lower Animals.**

An interesting case of this nature is described in a recent report of the London Epidemiological Society, quoted by the *Medical Press and Circular*. A dog licked the hand of a child lying in bed, on whom the measles eruption was at its height. Twelve days later the dog sickened, and suffered for two days from nasal discharge, and four days later died, with marked congestion of the throat and air-passages. It has been held by some authorities that measles in man is the analogue of distemper in dogs; indeed, it has been urged that they are the same diseases; but this case contradicts such a view, for the dog in question had, four years previously, gone through an attack of distemper, and although second attacks of the various eruptive fevers are common enough in children, second attacks of distemper are rare among dogs, while such second cases, when they do occur, are invariably of a slight and temporary nature.

**The Use of Conium.**

Dr. A. M. Hamilton says that in the treatment of diseases where tremor is a symptom, much benefit has followed the use of conium at the female epileptic and paralytic hospital on Blackwell's Island. In two cases of chorea of long standing it produced a prompt amelioration of the patients' condition, and in the tremor of sclerosis it suppressed the movements for several weeks. It was given in the form of fluid extract, in doses of  $\text{m}\times$  three times a day.

**Vegetable Diet for Epileptics.**

An eminent physician, of Boston, of the last generation, was accustomed to put his epileptic patients on a vegetable diet. Dr. Merson gives, in the last volume of the West Riding Reports, a series of experiments he has made on this subject. From a review of the whole evidence furnished by his observations, Dr. Merson concludes that there are fair grounds for the deduction that farinaceous food is more suitable for epileptics than a mixed or nitrogenous diet.

**Disagreeable Effects of Guarana.**

According to a German authority quoted in the *Boston Medical Journal*, guarana is contra-indicated in that form of headache which is chronic, because it increases arterial tension by excitement of the heart, and elevates the tem-

perature by exaggerated oxidation. Even after its use in neuralgic headache, phenomena of its poisonous action may be observed from the appearance of a *malaise* more distressing than the headache which has disappeared under its remedial agency. A certain patient suffering from a facial paralysis due to a central lesion took guarana with the effect of producing redness of the face, staring eyes, slight irregularity of the pulse, moisture of the skin, delirium, dullness of hearing, and vesical and intestinal spasms. Dysuria is a frequent phenomenon.

**Chloral in Ulcers.**

Dr. W. M. Wright, Surgeon and Secretary of the National Home for Disabled Volunteer Soldiers (Southern Branch), Hampton, Va., writes us:—

"I find nothing so valuable in the treatment of old indolent ulcers, not dependent upon necrosis, as a local application of a solution of hydrate of chloral. Among the old soldiers of our home we have a great variety of such cases, and I find nothing improves their condition better and more rapidly than the above."

**On Chewing Gum.**

This peculiarly American habit seems on the increase. Many thousands of pounds are consumed annually. The tree is found in many parts of the Southwest. The gum exudes through cracks in the bark at all seasons of the year, and hardens on exposure. It is soluble in alcohol, and makes a smooth, pleasant syrup. It is collected and shipped to the "chewing-gum manufactories," which put it up in convenient packages and send it to the retailers.

**Salicylic Acid Salts.**

Prof. Maisch, of this city, not long since stated his belief that if the estimate of Prof. Kolbe and others as to the virtues of salicylic acid are to be of value to physicians, they must use it in the free state, as this is the only way in which it is effective; if salts are employed to effect a more ready solution, some chemical change is most probably the result. On the other hand, salicylate of sodium, when treated in aqueous solution with carbonic acid, is decomposed, yielding free salicylic acid. Since carbonic acid is continually formed by the various tissues, the blood, notwithstanding its alkalinity, contains a certain quantity of carbonic acid in the

free or continually dissociating condition, and for these reasons Prof. Binz believes that salicylates are not without action when taken internally. This view is strengthened by the antiseptic action observed in liquids capable of putrefaction, urine for instance, when mixed with salicylate of sodium and carbonic acid.

In this connection we may add that in the *American Journal of Pharmacy* Mr. Charles Becker states that:—"When one part of salicylic acid and two parts of olive oil are heated together they form a homogeneous mixture, admirably adapted for application to surfaces. The oil will separate to some extent on standing for a time, but agitation will easily combine it again."

#### The Mad-stone.

The description of the "Mad-stone" we published lately (*cur. vol. p. 189*), from a gentleman in Iowa, has attracted very diverse criticism. The *Druggists' Circular* says on the subject:—

"The reputed efficacy of these stones against bites is generally attributed to their porous nature, which enables them to absorb with extreme rapidity all the venomous or virulent matters left in the wound. As to their origin, the opinion that they are of animal and not of mineral creation is probably correct. We should not be surprised if they were in fact only a variety of the bezoars, once so celebrated in ancient medicine."

It appears from a passage in Holmes' "Surgery" that the natives of Hindostan make use of a similar stone to extract and annul the virus of poisonous snakes.

#### The Effects of Physical Culture.

It is stated in the *Scientific American* that an official inquiry into the results of gymnastic exercises has recently been instituted at a military gymnastic school in France. The results of the inquiry, which extended over six months, established: 1. That the muscular force is increased, on an average, 15 to 17 per cent., and occasionally from 25 to 30 per cent., while the force has, as we might expect, a tendency to become equal on both sides of the body. 2. That the capacity of the chest is increased by one-sixth at the lowest. 3. That the weight of the individual is increased from 6 to 7 per cent., and occasionally from 10 to 15

per cent., while the bulk of the body is diminished, thus showing that profit is confined to the muscular system. The increase of muscular force was generally confined to the first three months of the course. During the last moiety a serious diminution usually occurred; and here the dynamometer gave positive indication of the necessity of moderating or suspending the exercises.

#### Antidote to Nitrite of Amyl.

In the course of a discussion on nitrite of amyl, reported in the Proceedings of the Medical Society of the County of Kings, Dr. Squibb proposed the use of hyponitrous ether as an antidote to the nitrite.

"Hyponitrous ether, the potent ingredient in spiritus ætheris nitrosi, appears to have the almost absolutely opposite physiological effect to amyl nitrite; it contracts, while the latter expands, the capillaries; it causes a blanched and shriveled look. This suggests its use in the event of over-intoxication by amyl. The commercial spiritus ætheris nitrosi contains more alcohol than is required by the pharmacopœia, and less of the ether; it, therefore, is frequently disappointing in the treatment of ephemera and the like; it is falling into disuse."

#### Pycnanthemum Linifolium.

Mr. Charles Mohr stated at the meeting of the American Pharmaceutical Association that this plant is used in Alabama for debilitated and impaired conditions of the digestive organs by the negroes of that section. In attempting a chemical examination the author obtained an acid which by all the tests given appears to be identical with caffeotannic acid. Besides this acid were found volatile oil, a caoutchouc-like resin, chlorophyl, a bitter resin, coloring matter, gum and sugar. The writer gave also a very complete botanical description of the plant itself.

#### The Nature of Ergotin.

According to the German chemist, R. Buchheim, ergotin belongs to the class of putrid products, and it is possible that we shall be able to obtain it from other sources than the rye fungus—for instance, from putrid blood, a body having similar properties. It is itself a substance closely resembling animal gelatine.



## CORRESPONDENCE.

## The Prevention of Post-Partum Hemorrhage.

ED. MED. AND SURG. REPORTER :—

A short sentence uttered by Dr. Fitch, of Illinois, during a discussion of hemorrhage, at a session of the Obstetric Section of the American Medical Association, has very much occupied my thoughts since reading said discussion. The sentence was composed of only four words, "prevent hemorrhage by anticipation." In former years I was very much annoyed and frequently much alarmed by after hemorrhage, but for the past fifteen years I cannot call to mind a case in which I have been alarmed or even annoyed by it, and simply because I always aim to prevent by anticipation. My plan has been this, as soon as the child is born, before I proceed to remove the secundines, I place my patient in a horizontal position, removing everything from under the head and placing it at least on a plane with the body, or if any difference, a little lower. I generally let my patient remain in this position for one and a half to three hours, depending upon circumstances; then I direct the head to be raised gradually by the addition of a small pillow at a time, until she has recovered a comfortable position. By this means I think I have been able to "prevent hemorrhage by anticipation" most successfully.

J. E. LYONS.

Huntington, Indiana, October 25th, 1876.

## Singular Injury of the Abdominal Walls.

ED. MED. AND SURG. REPORTER :—

I take this opportunity to report a remarkable case I saw the other day :—

Madam José Frújé, now aged about fifty, and the picture of good health; has thirteen living children; has lost several, and has been enceinte twenty-four times. When a young girl she was struck by the end of a buggy shaft, over the region of the stomach, so forcibly as to rupture the abdominal muscles, but left the skin unbroken. Through that at first small orifice a protuberance of the size of a very small egg appeared; it remained about the same until she married, and became pregnant, when, during each gestation the opening became enlarged, until now the stomach, and all the small intestines, and maybe more, hang outside of the abdominal cavity, in a sack of the skin, about eighteen inches long and twenty-four inches in circumference. She wears a belt to suspend her bowels around her neck; is active and cheerful as a girl; laughs at the idea of packing her bowels about her. She says when she drinks a glass of cold water, and lays her hand over the stomach she can feel the temperature of the water very sensibly.

D. W. FOSTER, M. D.

Ville Plate, La., October 19th, 1876.

## NEWS AND MISCELLANY.

## Personal.

—We mentioned, a few weeks since, the death of Prof. Gustave Simon, of Heidelberg; some further account of the close of his useful life may be interesting. Since 1870 he has suffered more or less from ill-health, and had gradually to withdraw from active work. In December, 1875, he resigned his chair at the University, but was able to give consultations at his house, and even to perform the smaller operations. But the dyspnoea, from which he suffered, grew upon him, although the enforced rest for a while seemed to do him good. On August 27—he had been feeling unusually well this day—an attack of intense dyspnoea came on during the evening; he was quite conscious, and earnestly besought his medical attendant to perform tracheotomy. This was done, and relieved him. He appeared to have been altogether uncertain as to the nature of his own illness, though so acute in the detection of disease in others. At the post-mortem examination there was found extensive oedema of the lungs, the result of aneurism of the descending portion of the thoracic aorta, which was almost completely filled with clot. Dr. Simon's chief works are the following :—"Contributions from the Clinical Wards of the Rostock Hospital, 1868;" "The Introduction of Long Elastic Tubes into the Intestine, and the Forced Injection of Water;" "The Surgery of the Kidneys" (which contains a case of successful kidney extirpation), part 1. He was occupied with part 2 of this remarkable work even on his death-bed, and it is hoped that it will soon be published, as much of it is completed. He invented also, as a method of examination of the abdomen, the gradual dilatation of the rectum, and the introduction of the whole hand.

## The Temperance Question at Brussels.

At the "Congress of Public Health," which recently commenced at Brussels, an active discussion on intoxicating beverages took place. Dr. Crocq, Professor of Medicine at the University, and a physician of considerable repute, averred that alcohol produces worse lesions than arsenic, and that a drunkard died at the age of forty with an emaciated and feeble body, and pointed out the especially destructive effects of absinthe—an abominable beverage, happily almost unknown in this country. Dr. Crocq is convinced that within the last thirty years the consumption of alcohol had increased to an extent that greatly augmented the amount of mental disease existing in Europe. The hospitals, he stated, are full of such cases. Mr. Hoghe was inclined to the belief that it was not alcohol which worked the mischief, but the deleterious ingredients introduced into spirituous drinks, especially when new, and he thought that a "sanitary police" should prevent the sale of

drinks until they have been allowed to soften with age. The discussion on this important subject lasted for some hours, the general opinion appearing to be, not in the direction of teetotalism, but in favor of the moderate use of beer, wine, and spirits.

#### Anæsthetics—Questions by the Surgeon-General.

With a view of collecting precise data relative to the effects of chloroform and ether, the Surgeon-General of the Army has issued a circular directing medical officers to record, during the year 1877, the cases in which recourse is had to anæsthetics, noting the following particulars:—Name and age of subject, nature of the anæsthetic, the quantity used in maintaining anæsthesia, the time required to induce complete insensibility, the time the anæsthetic influence was maintained, the mode of administration, and whether vomiting, excitement, or great prostration, was observed during or after the administration.

#### Arab Faith in Medicine.

The Arabs in general constantly have recourse both to charms and to medicine, not only for the cure, but also for the prevention of diseases. "They have, indeed," says Lane, in the notes to his translation of the "Arabian Nights," "a strange passion for medicine, which shows that they do not consider fate as altogether unconditional. Nothing can exceed the earnestness with which they often press a European traveler for a dose; and the more violent the remedy the better they are pleased. I was applied to on behalf of three donkey-drivers supposed to have been poisoned. I gave the applicant three strong doses of tartar emetic, and he soon came back to thank me, saying that the medicine was most admirable, for the men had hardly swallowed it when they almost vomited their hearts and livers, and everything else in their bodies."

#### Madame Hutin's Cologne.

This fragrant lotion is still popular in New York. It was first used by Madame Hutin (afterward Madame Labasse) about 1830. She was a celebrated French dancer on the stage in New York.

R.	Oil of lavender,	3vj
	Oil of lemon,	3vj
	Oil of rosemary,	3ij
	Oil of cinnamon,	gtt.xx
	Alcohol,	Œj.

This, although very weak, was doubtless refreshing when used, as it probably was, freely, to wash with after severe exertion.

A well-informed perfumer says that it would answer the original design of cologne water, viz., as an application for the relief of headache, or for the use of the sick room, where the

ordinary sweet colognes are only deleterious. He says that oils of lavender and rosemary are always refreshing, while the sweet perfumes are often sickening to a weak person.

#### The Health of Philadelphia.

The health of the city continues surprisingly good, and, in spite of the large number of visitors and the generally unfavorable character of the season, the mortality is remarkably low. Physicians here have to read the New York papers in order to learn that any "Centennial" or other fever is rife in Philadelphia. The strong imaginations of sensational reporters, and not sewer gas, is the sole etiological factor of this new disease.

The prevailing good health is the more noteworthy, as throughout the State malarial diseases have been unusually common this fall.

#### The Yellow Fever.

The yellow fever deaths in Savannah have decreased to five or six a day. The epidemic is substantially over. We hope a careful history of it will be laid before the profession.

#### Utilizing the Ague.

The Chicago *Journal* says the people of that State are smart enough to turn even the ague to account. It relates this narrative in point:—

"Your husband is sick a good sight of late, ben't he?" remarked a Southern Illinois woman to another, one day last week.

"Yes," answered the wife, "he's got tuk down mighty hard with them 'ere ager shakes agin."

"I shud think it 'ud be sorter distressin' like ter have 'round the house," remarked the other, sympathizingly, "spec'ly when yer house-cleanin'."

"Wal, so it wud be," responded the wife, in self-consoling tones, "but when he's got inter one of his chills, and I want the rag carpet shuk, yer see he's a powerful smart hand ter hitch onto it."

#### QUERIES AND REPLIES.

##### Carthagena Bean.

*Aretus*.—"Can you tell me the botanical name of the 'Carthagena bean' and its uses?"

*Reply*.—It is the fruit of the *Bactris major*, a species of palm, and is employed as an antidote to the bite of venomous serpents. We do not know of any scientific investigation of its properties. Perhaps some of our readers do.

#### DEATHS.

**HAFFERTY**.—In Palestine, Illinois, on Thursday, October 12th, at 4 A. M., of enterocolitis, Madge Shore, youngest daughter of Dr. T. N. and Sade E. Rafferty, aged one year and twenty days.